OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/653,182

DATE: (?/20/2000 TIME: 17:29:53

ENTERED

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4 110 - APPLICANT: Paul D. Pobbins
                     Chibao Mi
                     Raymond Fritsell
                     Joseph C. Glorrosc
         8
                     Andrea Cambotto
        10 - 170 - 11718 OF INVENTION: HENRIFICATION OF PERTIDES THAT FACILITATE
        11
                     UPTAKE AND CYTOPLASMIC AND/OR NUCLEAR TRANSPORT
        12 OF PROTEINS, INA AND VIRUSES
15 (130) FILE REFERENCE: AP325 3-A-A
C--> 17 <140> CURRENT APPLICATION NUMBER: US/09/653,182
C--> 17 (141> CURRENT FILING DATE: 2000-08-31
       17 -1500 PRIOR APPLICATION NUMBER: 00/151.980
18 | 151 | PRIOR FILING DATE: 1909-09-01
20 | 150 | PRIOR APPLICATION NUMBER: 00/188.941
       21 - 151 - PRIOR EFELLOGION NOMBER (***17185.941 21 - 151 - PRIOR FILLING DATE: 20(0-03-1) 23 - 150. NUMBER OF SEQ ID NOS: 75 25 170 - SOFTWARE: FastSEQ for Windows Version 3.0 27 210 - SEQ ID NO: 1
        28 2119 TENJIH: 12
        29 - 2122 TYPE: PRT
        vis 2130 ORGANISM: Artificial requence
        S2 - 220 - FEATURE:
             SPREATHER INFORMATION: random peptide library
        ^{1.5} + 100 + SEQUENCE: 1
            Lys Arg The The Ohn Arm The Low Ser Arm Ash Ser
       39 | 210 + SEQ 1D Not 2
40 | 211 + LENGTH: 12
       40 211 - LENGTH: 12
41 212 TYPE: PRT
42 213 - OPGANISM: Artificial Lequence
44 2200 FERIURE:
45 - 224 - OTHER INFORMATION: raidom poptide libiary
47 146 - SEQUENCE: 2
48 Eye Arg The His Pre Arg Lo: The Arg Ser He Arg
        11 210 - SFQ ID NO:
53 211 - LENGIH: 12
51 212 - TYPE: PET
            213 companish: Artificial coquence
            1.10 - FFATURE:
             223 - THER INFORMATION, raidom poptide library
             HOLE SEADENCE - B
             Pro less Aig Louis to the Air Aig Shi tou ten Met
       AS 210 - FEL HE NOTE: 1
-- FILE ENTER 1.
-- FILE INFE: PRI
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/653,182

DATE: 09/20/2000 TIME: 1 :19:53

Impart Set : A:\PTO.txt
/entport Set: N:\CRF3\09202000\1653182.raw

```
es 213 - OPGANISM: Artificial Sequence
79 - 120 - FEATURE:
71 - 213 - OTHER INFORMATION: random peptido lilatary
73 - 100 - SEQUENCE: 1
74 Pro The Arg Arg Arg Lys Lys Leu Arg Arg Leu Lys
7 210 - SEQ 10 No. 5

18 211 - LENGIH: 12

70 212 - TYPE: PRT

5) -213 - -PS7 NISM: Attiticial Sequence

82 - 220 - FEATURE:
8: 223: OTHER INFORMATION: random peptide library
80 100: SEQUENCE: 5
So Aig Aig Glm Aig Aig Thr Sor Lys Leu Met Lys Arg
89 - 210 - SEQ (D NO): 6
90 - 211 - LENGIH: 12
91 212- PYPE: PRT
92 213- OPGANISM: Artificial Sequence
91 2002 FEATURE:
95 223% OTHER INFORMATION: random peptide library
9\%\sim100 \approx \text{SEQUINCE}; -6
98 Mot His Lys And Pro Thr Thr Pro Sor Arg Lys Met
99 | 1
| 101 + 210 + SEQ | ID | NO:
102 (211 - LENGTH: 12
103 (212) TYPE: IPI
104 - 213 - OPGANISM: Artificial Sequence
106 - 220 FEATURE:
107 - 223 - THEE INFORMATION: random peptide library
185 - 406 - SEQUENCE:
III. Aig Glin Ang Ser Aig Arg Arg Pro Lou Ash Ile Aig
(11 - 210: SEQ ID NO: 8
115 - 211 | LENGTH: 12
116 - 212 | TYPE: PRT
     213 - ORGANISM: Artificial sequence
216 - FEATURE:
223 - OTHER INFORMATION: random peptide library
130
122 100 - SEQUENCE: 8
123 Arg Ile Ard Het Ile Gin Ash Leu Ile Lys Lys Thr
      100 - SEQUENCE: 8
      210 - SEQ ID NO: 3
126
1. 0.12 DENCHE OF 1/8 012 TYPE: PRI
      203 - #SANISM: Artificial Sequence
131 ...DS FEATURE.
       ... 3 × THEP IMPLEMAIN More named as peptide into di-
1 \leq i \leq 1 \leq \sigma \leq SEQUEN^{-1}r_{i+1} = i
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/653,182

DATE: 04VL0VD0 00

Input Set : A:\PTO.txt
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```
135 Ser Aig Aig Lys Aig Glin Aig Ser Ash Met Aig Ile
1:8 -210 - SEQ ID NO: 10
159 -2115 LENGTH: 12
190 SE12 STYPE: PRT
441 <213 - ORGANISM: Artificial Sequence
147 - 220. FEATURE:
141 - 2200 OTHER INFORMATION: random peptide library
146 - 4000 SEQUENCE: .0
147 Gin Arg IIe Arg Lys Ser Lys IIe Ser Arg Thr Leu
148 1
150 \sim 210 \sim \text{SEQ} / \text{ID} / \text{NO} \approx 11
150 CAIO: SEV ID MOS. II

161 CAIC: LENGTH: 12

172 CAIC: TYPE: PRT

153 CAIC: OPGANISH: Artificial Sequence
1\,\text{no}\,\,{<}220\,\times\,\text{FEATURE:}
1\%6 + 22\% + 0 THER INFORMATION: random perfide library 1\%8 + 400 + 8 EQUENCE: 11
159 - Pro Ser Lys Arg Leu Leu His Ash Ash Leu Arg Arg
160 1 5
162 <21(5 SEQ ID NO 12
161 - 21.2 (ENGTH: 12
165 \times 21. \times \text{IYPE: PRT} 166 \times 2119 \times \text{ORGANISM: Artificial Sequence}
108 -226 - FFATURE:
109 -22 - OTHER INFERMATION (random poptide library
I I - 100 - SEQUENCE: 1.1
      His Ard His fle Aig Ard Gin Ser Ler He Met Leu
180 - 330 - FEATUPE:
181 - 225 - OTHER INFORMATION: random peptide library
183 - 400 - SEGUENCE: 13
184. Pro Gli Ash Arg Leu Gli Ile Arg Arg His Ser Lys
187
      210 - SEQ ID NO: 14
     221 - LEMSTH: 12
212 - TYPP: PRI
213 - ORGANISM: Altificial Sequence
361
189
190
     220 - FEATURE:
2003 - THER IMPORTOR of deine poptike illeraty
192
1)5 400 SEQUENCE: 11
10m Pro Pro His Arm Air Tie Jim Ard Ard Fou Ash Met
19"
197 | 1
199 | 24. | SEQ II M. . 1
200 | 244 | DENGIH: 12
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/653,182

PAIE: F9/20/2000 TIME: 17:29:53

Imput Set : A:\PTO.txt

Output Set: N:\CRF3\09202000\I653182.raw

```
201 ×2105 TYPE: PRT
202 ×213 · OPCANISM: Artificial Sequence
203 ×220 · EATURE:
205 - 223 - OTHER INFORMATION: random poptide library
20 ' + 450 - SEQUENCE: 15
208 Ser Met Leu Lys Arg Ash His Ser Thi Ser Abh Arg
200 1
211 2101 SEQ ID NO: 16
212 2112 LENGTH: 12
NET - 212 TYPE: PRT
214 - 213 ORGANISM: Artificial Sequence
216 LTG FEATURE:
218 LTG FEATURE:
218 LTG FORMER INFORMATION: random poptide library
229 100 SEQUENCE: 16
     Gly Ser Ard His Pro Ser Lea lle lle Pro Ard Gln
239 <230 < FEATURE:
230-2735 Other informations random poptide library 23.7+1909 SEQUENCE: 17
287 | Sor Pro Met Cln Lpc Thr Met A.m Leu Pro Pro Met 246 | 1 | 5 | 1e | 256 + 210 - 852 | ID NO. 18 | 257 + 211 + LFNGTH: 12 | 756 + 212 + 5555 | ERT
239 (213 ORGANISM: Artificial Sequence
241 180 - BRATUPE:
242 - 323 OTHER INFORMATION: random peptide library
243 - 180 SEQUENTE: 18
245. Ash Lys Arg Ile Leu Ile Arg Ile Met Thr Arg Tro
218 - 210. SEQ ID NO: 19
210 211: LENGTH: 16
250 212: TYPE: PRT
       013 - PRGANISM: autennoped a
      400 - SEQUENCE: 19
254 Arg Olm He Lys He Trp Hie dlm Asm Arg Arg Met Lys Trp Lys Lys
       210 - SEP 10 NO - 20
256 211 - LENGTH: 12
193 - 12 TYPE: cml
200 - 213 - ORGANISM: Artificial Sequence
        TO FEATURE:
     223 - OTHER INFORMATION: Landom poptide library
        -) - ระบุบอนาย
786. Ala Sid bro Lew Gla His Gig Ser Asp ijs Ala Thi
```

RAW SEQUENCE LISTING PATENT APPLICATION: US/09/653,182

DATE: 09/20/2000 TIME: 1 .39:53

Input Set : A:\PTO.txt
Output Set: N:\CRF3\09202000\1653182.raw

269 210 - SFQ ID Not 21 2 10 + 21. + LENGTH: 11 272 + 242 + TYPE: PRT 273 - 213 - 1145 mm 273 - 213 - GRJANISM: Luman 775 - 400 - SEQUENCE: 21 276 - Tyr Gly Ard Lys Lys Ard Arg Gin Arg Atg Ard 188 Lys Leu Ala Lys Leu Ala Lys 284 291 210 - SEQ 10 NO: 23 292 211 - LENGTH: 14 293 .01. + TTPE: FPT .094 + 01. + ORGANISM: Artificial Sequence .296 + 224 + FEATURE: 29% - 22% - OTHER INFORMATION: random poptide library 299 - 100 - SEQUENCE: 23 400 Lys Leu Ala Lys Lou Alu Lys Lys Lou Ala Lys Leu Aia Lys 103 303 - 2105 SEQ 10 Not 24 904 - 211 - EENGTH: 08 :05 -212 - TYPE: PPT : 405 -21 - ORGANISM: Artificial Sequence -08 -220 - FEATURE: 30 + 32 - OTHER INFORMATION: random poptide library -11 - 400 - SEQUENCE: 24 $\langle 12\rangle$ Ard Arg GIn Arg Arg Thr Ser Lys Lew Met Lys Arg Gly Gly Lys Lew 10 114. Ala Lys Len Ala Lys Lys Leu Ala Lys Leu Ala Lys .20 $17 \times 210 \times \mathrm{SEQ}$ ID No: \pm 18 211 LENGTH, 17 212 - TYPE: PRT 320 215 OPGANISM: Artificial Sequence 220 FEATURE: 220 OTHER INFORMATIONS random position library 322 323 ize 1909 shoutence. 2 327 His Cly Trp Clx He His Cl: Lou Lou His Ard Ala 0 210 Sig in Ma. 26 21 211 LENGTH: 1: $s \times f = 2.1 \ldots \times 11 \times F \times (4.5 \, \mathrm{FeV})$

 VERIFICATION SUMMARY
 DATE: 09/20/2000

 FATENT APPLICATION: US/09/653,182
 TIME: T.LD.: 3

Input Set : A:\PTO.txt
output Set: N:\CRF3\09202000\I653182.raw

L:17 M:270 C: Current Application Number differs. Replaced Current Application No. L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Late